STATE OF MARYLAND

DHMH

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July 9, 2010

Public Health & Emergency Preparedness Bulletin: # 2010:26
Reporting for the week ending 07/03/10 (MMWR Week #26)

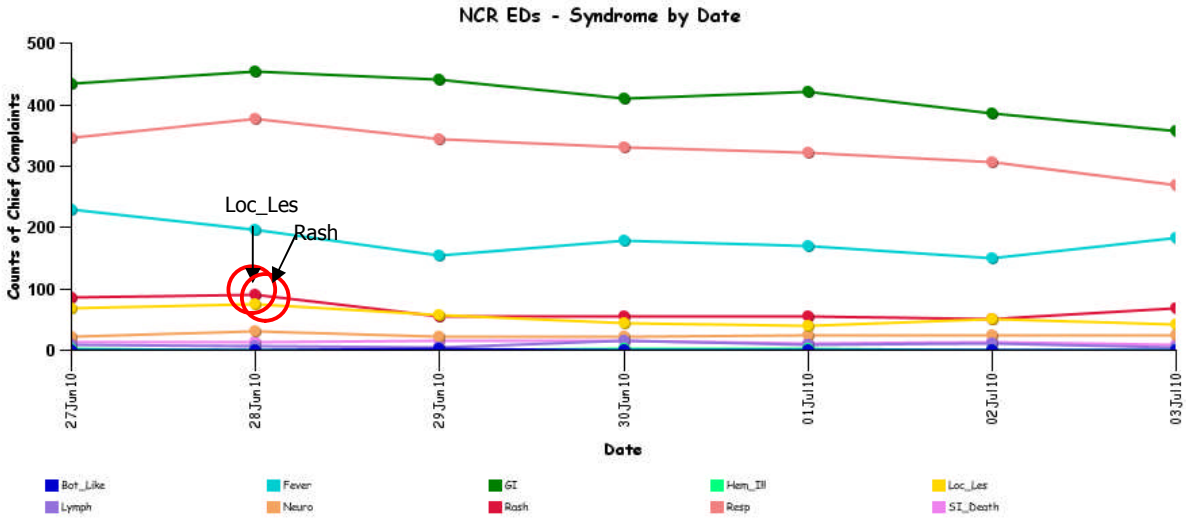
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

SYNDROMIC SURVEILLANCE REPORTS

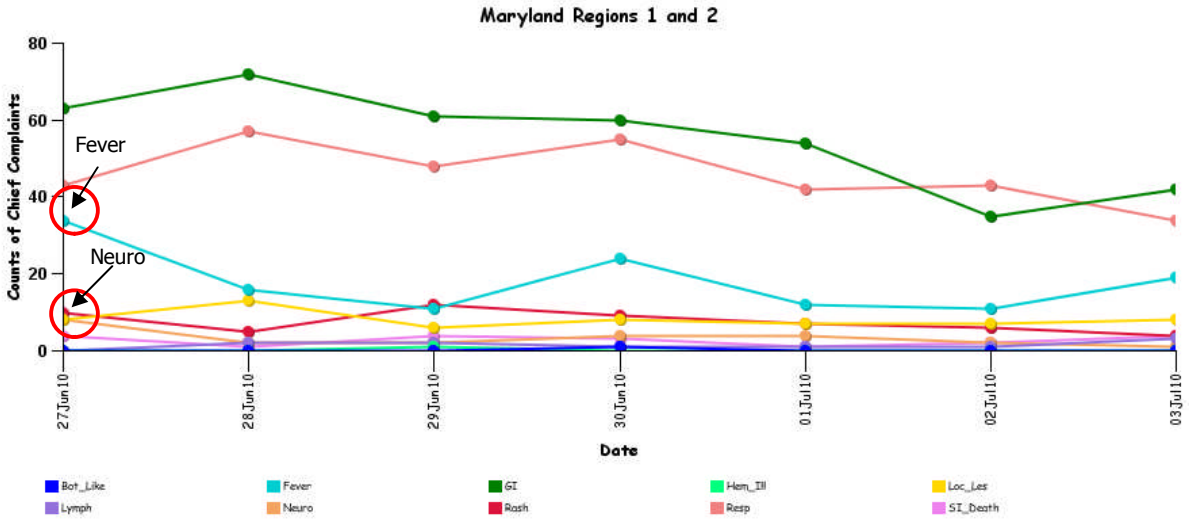
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

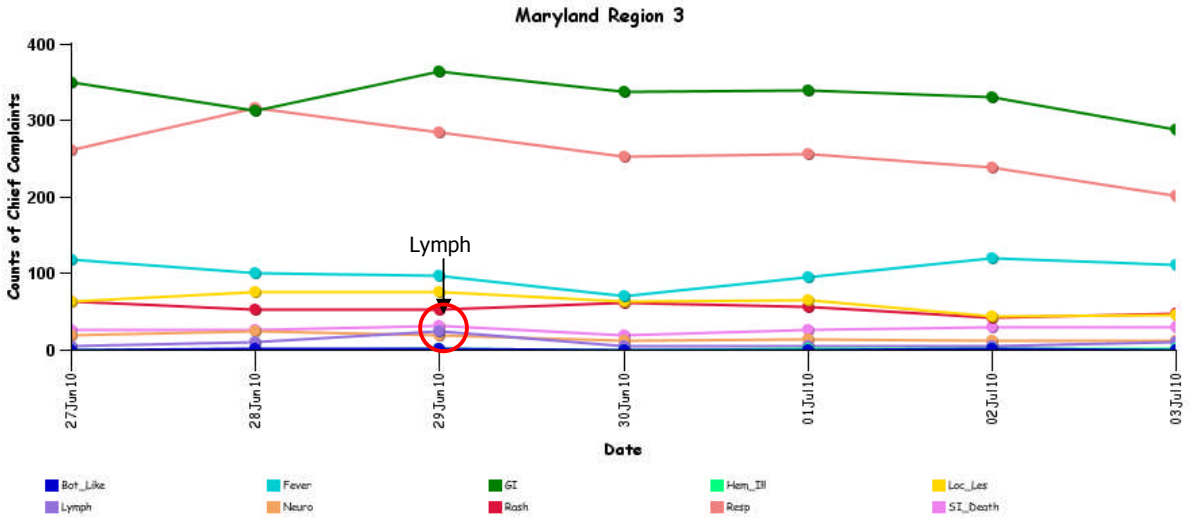


* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

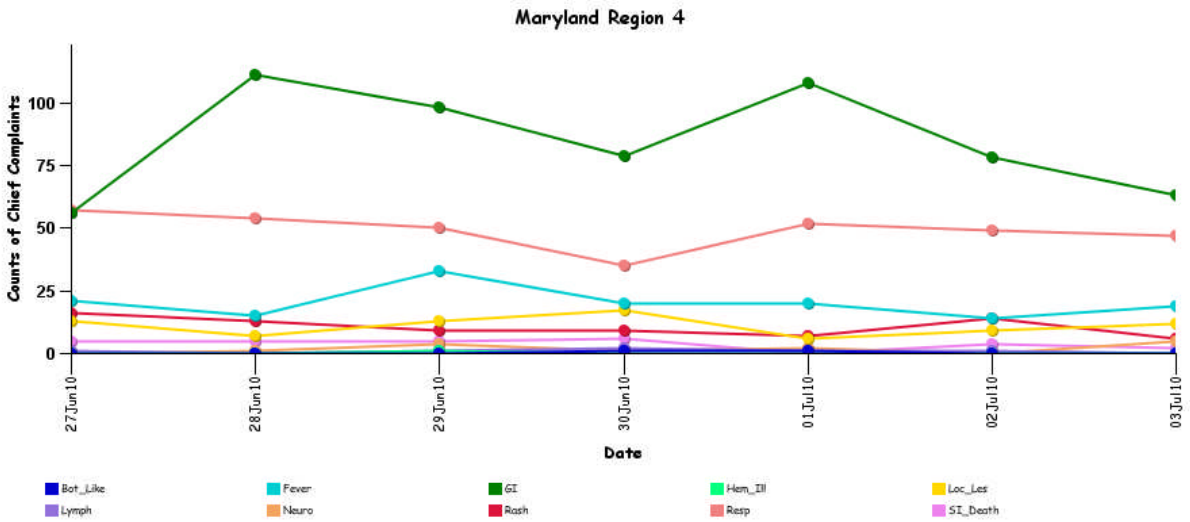
MARYLAND ESSENCE:



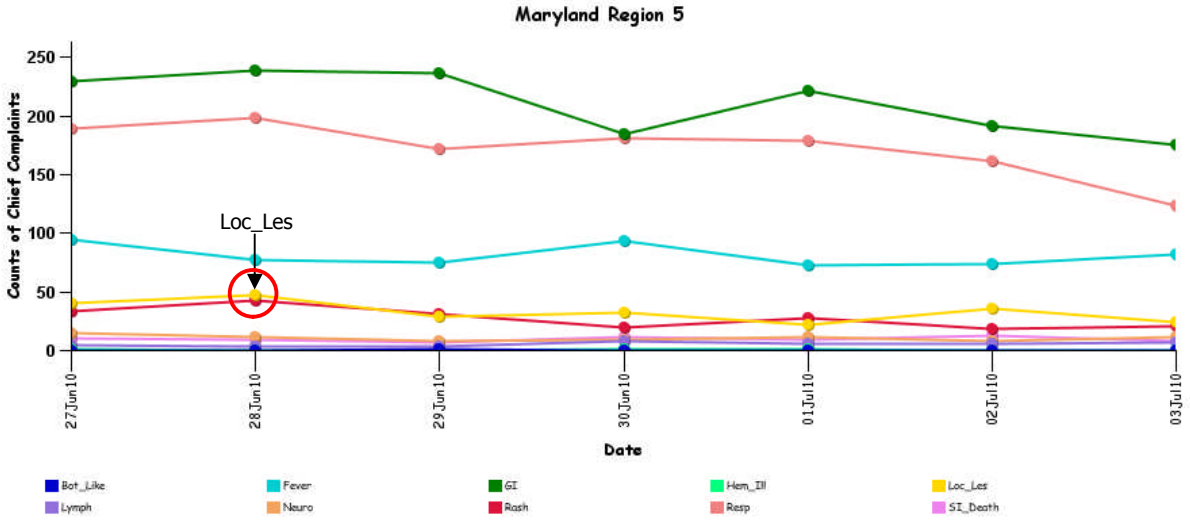
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



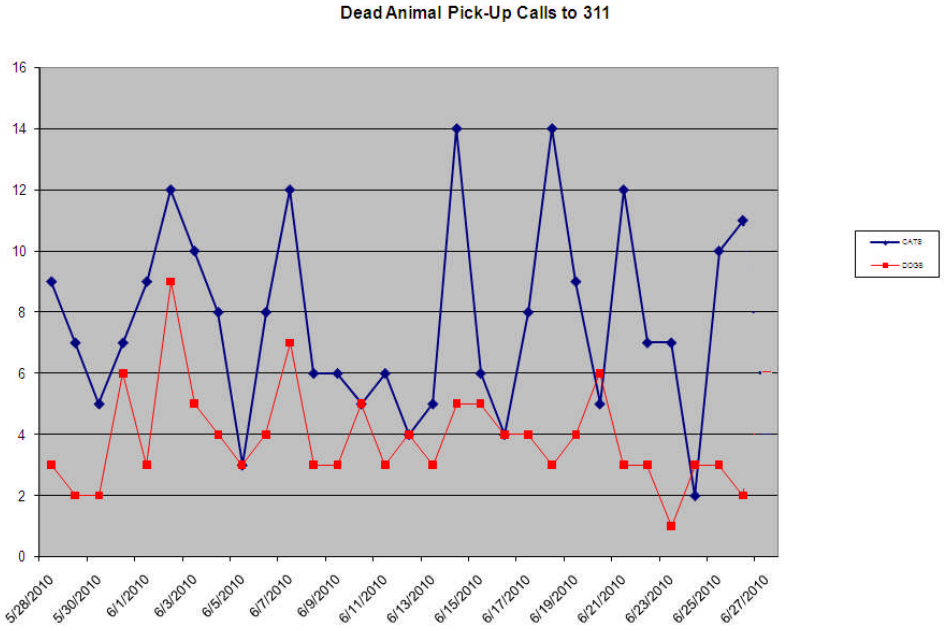
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

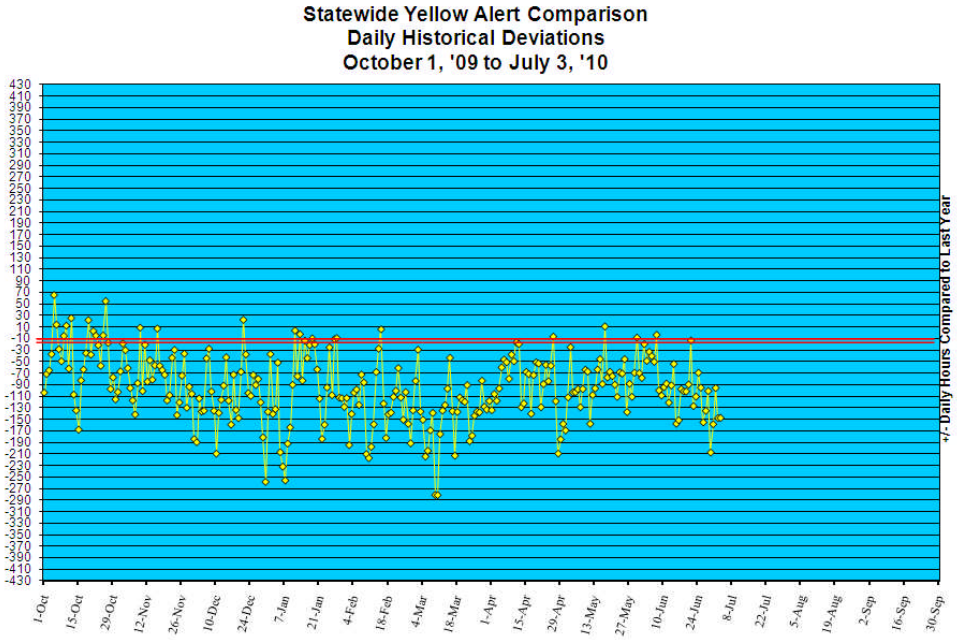
BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

The data is for MMWR week 25, last week.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/09.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (June 27 - July 03, 2010):	15	0
Prior week (June 20 - June 26, 2010):	08	0
Week#26, 2009 (June 28 – July 04, 2010):	15	0

4 outbreaks were reported to DHMH during MMWR week 26 (June 27-July 3, 2010)

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS in a Nursing Home

1 Foodborne outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Community Center

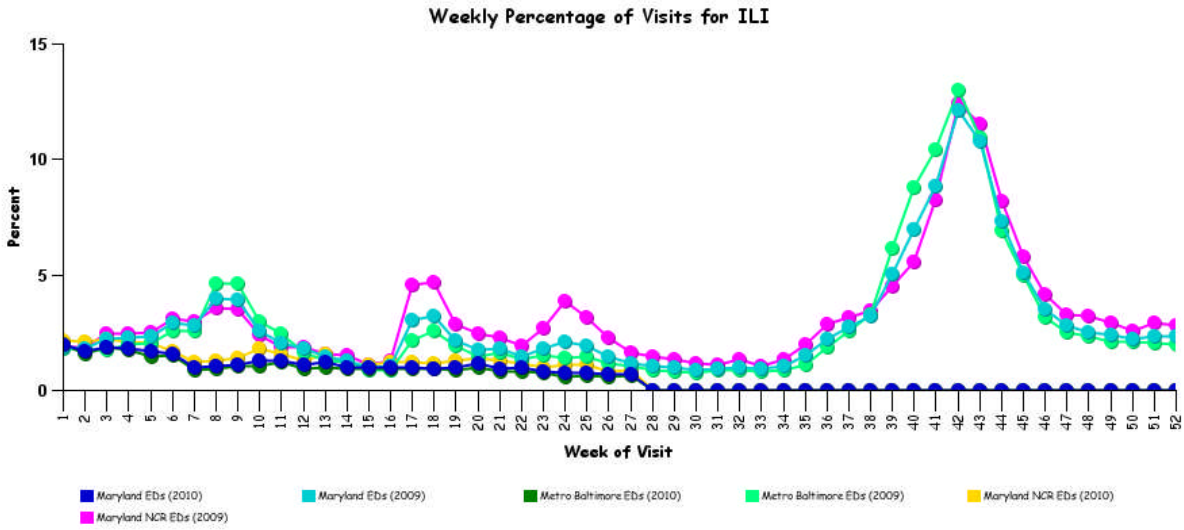
1 Respiratory illness outbreak
1 outbreak of ILI/PNEUMONIA in a Nursing Home

1 Rash illness outbreak
1 outbreak of SCABIES in an Assisted Living Facility

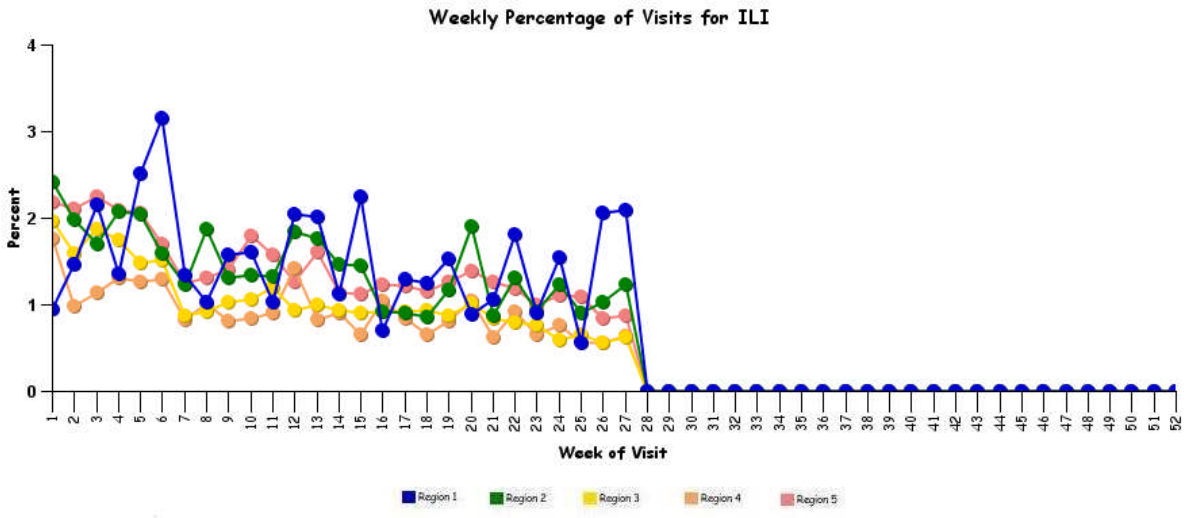
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the
week.



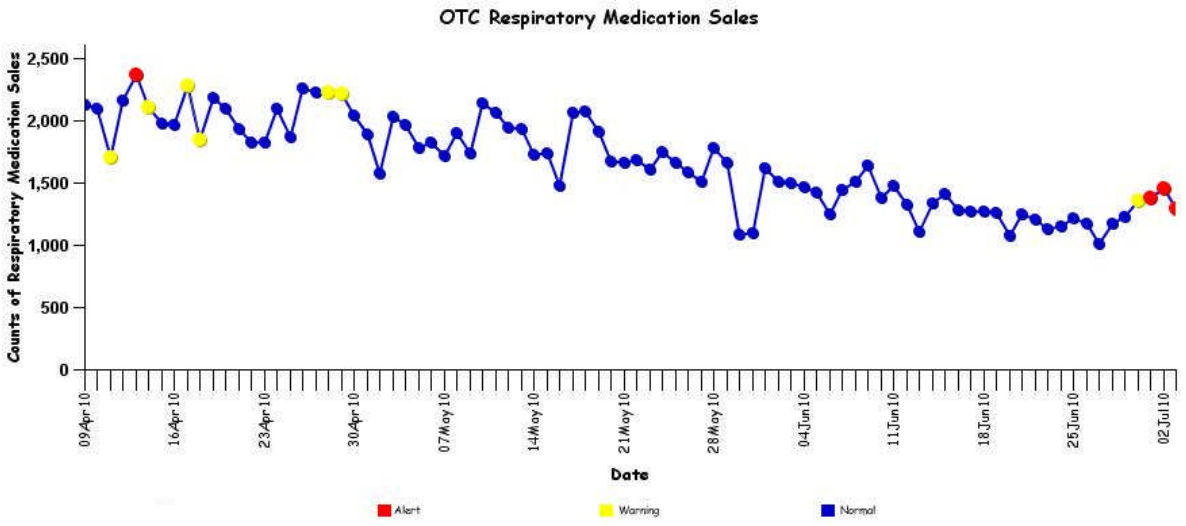
* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE:

WHO Pandemic Influenza Phase: Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

**More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/Documents/Plans/PandemicInfluenzaResponseAnnex(Version7.3).pdf

AVIAN INFLUENZA-RELATED REPORTS:

WHO update: As of June 08, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 499, of which 295 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC, MONSOON (INDIA): 30 June 2010, Swine flu [influenza pandemic (H1N1) virus infection] deaths continued their upwards surge since the onset of monsoon with 17 fatalities reported due to the disease in the country since 21 Jun 2010, the largest numbers of which occurred in Kerala and Maharashtra. Both the states reported 7 deaths each while Andhra Pradesh reported 2 and Uttar Pradesh one, health ministry officials said today. All 345 cases reported during the week are indigenous cases. Up to the present, samples from 143 285 people have been tested for influenza H1N1 [virus infection] and 33 083 (23 per cent) of them have been found positive. With the new cases, the swine flu toll in Kerala since the monsoon hit the state has risen to 32. Kerala reported 16 deaths from 15 May to 15 Jun 2010, prompting the Central government to send a 3-member team to the state to assess the situation.

Resources:

http://www.cdc.gov/h1n1flu/

http://www.dhmh.maryland.gov/swineflu/

NATIONAL DISEASE REPORTS

EASTERN EQUINE ENCEPHALITIS (FLORIDA): 30 June 2010, State officials are warning horse owners to get their animals vaccinated against eastern equine encephalitis [EEE] after a surge of reported cases, especially in areas where the disease is less common. There have been 16 confirmed cases statewide this year [2010], which is a normal number, but officials say 7 of those were reported on Wednesday, 23 Jun 2010. "Most of the cases have been in the central and north central part of the state which is normal. But we are also seeing increased EEE and West Nile virus activity in sentinel chickens in the southern part of the state, including Martin County which has not had EEE detected in 30 years," state ag commissioner Charles Bronson said in a news release. He also noted a confirmed case in Collier County. That horse, which lived near Wilson Boulevard North in the north western part of the county, was euthanized on 9 Jun 2010. EEE is a viral disease that affects the central nervous system and is transmitted to horses by infected mosquitoes. Clinical signs include fever, listlessness, stumbling, circling, and coma, and in 90 per cent of cases the disease is fatal. Bronson says EEE is preventable, and urges all horse owners to check with their veterinarians on their animals' vaccinations and/or booster shots. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, AVIAN (COLORADO): 27 June 2010**,** Avian botulism is causing ducks and geese to get sick and die at Duck Lake in City Park. Denver Parks and Recreation says the birds die off at the park at about this time every year. What is different about this year [2010] is that the lake is being renovated. In February 2010, workers began to drain some of the water out for an improvement project. The man-made lake had water quality problems, according to officials. The project will re-contour the lake-bed once all the water is drained and the bottom is dry. In the meantime, the lower water levels mean higher concentrations of whatever is in the water, making the birds sick. "One of the reasons we have the issue of avian botulism is because of the number of waterfowl in City Park. Birds, they come into the park; they're fed; they have Kentucky blue grass to eat; they don't migrate like they're supposed to, and so you have an increase in the number of birds, and it all contributes to the health risk that we do see with the waterfowl there," says Jill McGranahan with Parks and Recreation. Avian botulism poses no threat to humans. "There's absolutely no reason to avoid using City Park. It's perfectly safe," McGranahan said. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

EASTERN AND VENEZUELAN EQUINE ENCEPHALITIS, HUMAN, EQUINES (VENEZUELA): 03 July 2010, The Venezuelan Medical Science Societies have reported 294 cases of equine encephalitis, of which only 13 are in humans, of these cases 7 are Venezuelan equine encephalitis [VEE] and 6 are eastern equine encephalitis [EEE]. They officially reported the upsurge of diseases, that were eradicated years ago but recognizing that it is not a problem that has recently appeared, and they say there are more cases of Venezuelan equine encephalitis located in the state of Portuguesa, in the municipality of Espino. Former Minister Jose Felix Oletta stresses that equine encephalitis and eastern equine encephalitis have been on the rebound in Venezuela, using man as a host. Oletta explains that there is an increase in diseases due to circumstances such as climate change, rainfall, changes or mutations of the virus, the rising waters, the low rate of vaccination of horses and other circumstances. "In Venezuela we have found areas of very high risk in some states, others intermediate [risk] and others a low [risk]." In Zulia, Lara, Trujillo and Miranda there are disease foci. He explained that in [epidemiological] week 14 an editorial brought the equine encephalitis [cases] to his attention. "There was an outbreak in horses in Bolivar state, this was indicated on 7 May [2010] [but] we did not have confirmation [then], and we had confirmation this Saturday [26 Jun 2010], with Alert 24, which reports the existence of animal cases in the States of Bolivar, Aragua, Guarico, Zulia and Portuguesa." (Viral Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

TICK-BORNE ENCEPHALITIS (CROATIA): 03 July 2010, A total of 6 people are in a serious condition in a Croatian clinic after being infected by tick bites, Croatian media said on Thursday [1 Jul 2010]. 5 of the 6 are reportedly in a coma. "Five people are connected to artificial respirators and their recovery is uncertain," doctor Bruno Barsic told the media. The 6th patient is in better condition and his life is not in danger, he added. The patients, aged between 30 and 70, are from northern Croatia and were bitten by ticks carrying meningoencephalitis [tick-borne encephalitis virus] which causes a serious brain infection, Barsic said. A total of 11 people from rural areas have been hospitalised for tick bites this year [2010], but the latest cases are more serious. (Viral Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTRHAX, HUMAN (KYRGYZSTAN): 03 July 2010, Some 14 people were hospitalized with suspected anthrax in the Jalal-Abad Region of Kyrgyzstan, the press service of the Kyrgyz Ministry of Emergency Situations told Itar-Tass on Friday [2 Jul 2010]. "Six people sought medical aid in the Suzak district of the Jalal-Abad Region. The anthrax diagnosis was confirmed in one of them. The medical tests of other patients staying at the district hospital are being examined," the press service reported. A total of 7 more residents of the neighboring Nooken district are also undergoing treatment at the district hospital, the ministry press service said. "The preliminary tests showed that people could get infected with anthrax in the Nooken district from the meat of an ill domestic animal, which is under examination at a laboratory of the Jalal-Abad sanitary epidemiological centre," the press service reported. One more woman with the same diagnosis was hospitalized in the Bazar-Korgon district. Medical specialists believe that several anthrax spots are nested in southern Kyrgyz regions. Local residents get infected with this dangerous disease from time to time. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS (INDIA): 30 June 2010, Fear of a revisit of Japanese encephalitis in the state [Manipur] has surfaced with at least 8 patients found to have developed syndromes of the dreaded disease and been admitted at RIMS [Regional Institute of Medical Sciences] Hospital. To confirm the disease blood samples of the patients have been sent to JN Hospital, where facilities for blood testing for Japanese encephalitis [virus infection] were recently installed, state malaria officer, Dr H Nimaichand said today [29 Jun 2010]. Facilities for testing blood to confirm other mosquitoborne diseases are now available at RIMS Hospital, JN Hospital, Churachandpur District Hospital, and Tamenglong District Hospital. With the facilities available in the state, [there is no] inconvenience in getting results to confirm the kind of disease suffered by a patient related to mosquito bites, the doctor said. He also said that facility for testing for Japanese encephalitis [virus infection] will also be made available in other hospitals at the earliest opportunity. Authorities have started taking steps to provide [testing] in some selected government hospitals. Stressing the need for cooperation from other government departments, Chandramani said that the long abandoned pitch dug for the sewerage project undertaken by the PWD [public works department] in Imphal areas has become a favourable egg hatching ground of mosquitoes. Water reservoirs of the PHED [Public Health Engineering Department] at different places also need to be covered properly. The Fishery department also needs to supply fish that consume eggs [larvae and pupae] of mosquitoes. (Viral Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, BOVINE (KAZAKHSTAN): 29 June 2010, Meat which was illegally for sale in one of the markets in Pavlodar was contaminated with anthrax organisms. "Laboratory tests have confirmed the presence of *Bacillus anthracis* in the meat," said the chief state sanitary-veterinarian Rashid Nurbekov. Investigations have identified the owner of the goods. Results of laboratory tests will be given to prosecutors. Readers will recall that on 24 Jun 2010 at one of the markets in Pavlodar some 150 kg [330 pounds] of horse meat were seized. It had been imported from the quarantine area closed because of the anthrax in Aksu region. It was found that the undocumented meat in the market was rejected, but had been bought for sale by one of the market dealers. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER (REPUBLIC OF CONGO): 29 June 2010, The World Health Organization (WHO) has received preliminary reports of 5 suspected cases, including 3 deaths, with acute haemorrhagic fever from Mokouangonda, an isolated forest village of about 100 inhabitants in Mokoke district, Region of Sangha, in northern Republic of the Congo (Brazzaville). The 3 deaths were among male forest hunters from Mokouangonda who presented similar symptoms of epistaxis (nose bleeds), bloody diarrhoea, cough, and fever prior to deaths after a 1-2 week long hunting expedition in the Odzala National Park. A joint Ministry of Health (MoH) and WHO team is currently in the field to assess the situation and to collect clinical samples for diagnosis. These will be tested by the Centre International de Recherches Medicales de Franceville (CIRMF) Gabon, and Institut National de Recherche

Biomedicale a Kinshasa, DRC. A Regional Coordination Committee to contain the outbreak has been established in Ouesso, Sangha Region, under the Direction Generale de la Sante, assisted by WHO and other international partners including the Wildlife Conservation Society (WCS) in Congo and the Museum National d'Histoire Naturelle in France. Measures to respond to the disease outbreak including epidemiological investigation, social mobilization, and infection control are being implemented in the area. (Viral Hemorrhagic Fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CRIMEAN CONGO HEMORRHAGIC FEVER (PAKISTNA): 29 JUNE 2010, In the wake of [an outbreak of Crimean-Congo haemorrhagic fever] in the border areas of neighbouring Afghanistan, the Health Ministry has alerted the health departments of Khyber Pakhtunkhwa (province) and FATA (Federally Administered Tribal Areas) about this fatal virus [infection]. According to local sources, the deadly outbreak occurred in the Afghan province of Helmand where Crimean-Congo haemorrhagic fever (CCHF) virus infection had been confirmed in 7 people. The Ministry had directed the provincial health authorities to remain vigilant and collect data concerning Afghan refugees who were being treated in various hospitals in the province, adding that the authorities had been instructed also to send blood samples obtained from patients with suspected CCHF to the federal capital for laboratory tests. It has also been reported that all the public sector hospitals in the province have been instructed to take precautionary measures to avoid the spread of the virus. Security officials at the Torkham border [crossing] have also been ordered to strictly monitor the movement of refugees at the border. CCHF is transferred to humans through tick bite or through direct contact with blood or other infected tissues from livestock infected with the virus [and also by nosocomial transmission in hospital. - Mod.CP]. Symptoms include fever, aching muscles, dizziness, neck pain and stiffness, backache, headache, sore eyes, and sensitivity to light. Other clinical signs that may emerge include rapid heart rate, a dramatic drop in platelet and white blood cell counts, bleeding from the upper bowel, blood in the urine, nosebleeds, and bleeding gums. The severely ill may develop liver and kidney failure after the 5th day of illness. In patients who recover, improvement generally begins on the 9th or 10th day after the onset of illness. (Viral Hemorrhagic Fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EASTERN EQUINE ENCEPHALITIS (PANAMA): 27 June 2010, The Ministry of Health (MOH) reported this Thursday [24 Jun 2010] that 2 new suspected cases of equine encephalitis, in children, were confirmed by the Children's Hospital. With this report of the disease, there have [now] been 17 confirmed cases, one of whom has died. The Health Ministry said that 63 suspected cases of the disease are under observation in their homes. Most cases were reported in the province of Darien. The Ministry of Health (MOH) reported that 2 new hospital admissions were recorded in the Children's Hospital of suspected equine encephalitis, bringing the number of cases admitted to hospital to 17. One is a child under 8 years and another of 10 years of age, both children from El Real, Darien Province. The children are in stable condition. Of the 17 cases admitted to hospital since the start of the event, 6 remain in hospital in stable condition, 10 were discharged, and one died. During field investigations in Darien and Panama Este, so far there are 63 suspected individuals [cases] who have not required hospitalization but from whom blood samples have been taken for laboratory studies and monitoring. (Viral Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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